

AMENDMENTS TO THE CLAIMS:

The listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (Original) An organic electroluminescence element comprising, on a substrate:
 - an anode which acts as a hole injection electrode;
 - a cathode which acts as an electron injection electrode;
 - a plurality of light emission layers each having a light emission region; and
 - a charge generation layer which injects electrons into a light emission layer arranged close to said anode and holes into a light emission layer arranged close to said cathode, and said light emission layers and said charge generation layer being arranged between said anode and said cathode;wherein the work function of said charge generation layer is configured higher than the ionization potential of said light emission layer arranged close to said anode.

2. (Original) An organic electroluminescence element comprising, on a substrate:
 - an anode which acts as a hole injection electrode;
 - a cathode which acts as an electron injection electrode;
 - a plurality of light emission layers each having a light emission region; and
 - a charge generation layer which injects electrons into a light emission layer arranged close to said anode and holes into a light emission layer arranged close to said cathode, and said light emission layers and said charge generation layer being arranged between said anode and said cathode;

wherein the electron affinity of said charge generation layer is configured lower than the electron affinity of the light emission layer arranged close to said anode, and

wherein the ionization potential of said charge generation layer is configured higher than the ionization potential of the light emission layer arranged close to said cathode.

3. (Currently Amended) An organic electroluminescence element comprising, on a substrate;

- an anode which acts as a hole injection electrode;
- a cathode which acts as an electron injection electrode;
- a plurality of light emission layers each having a light emission region; and
- a charge generation layer which injects electrons into a light emission layer arranged close to said anode and holes into a light emission layer arranged close to said cathode, and said light emission layers and said charge generation layer being arranged between said anode and said cathode, wherein the potential difference between the electron affinity of the light emission layer arranged close to said anode and the electron affinity of said charge generation layer, and the potential difference between the ionization potential of the light emission layer arranged close to said ~~anode~~ cathode and the ionization potential of said charge generation layer are both configured 0.6 eV or less.

4. (Original) An organic electroluminescence element set forth in Claim 1, in which said charge generation layer comprises at least a first generation layer lying in the side of the light emission layer arranged close to said anode and a second generation layer lying in the side of the light emission layer arranged close to said cathode,

wherein said first generation layer is configured at a lower electron affinity compared to that of said second generation layer, and said second generation

layer is configured at a higher ionization potential compared to that of said first generation layer.

5. (Original) An organic electroluminescence element set forth in Claim 4, wherein the generation layer which is first fabricated is prepared by resistive heating.

6. (Original) An organic electroluminescence element set forth in Claim 1, wherein said charge generation layer is made of a dielectric material and the relative permittivity of said charge generation layer is larger than that of said light emission layer.

7. (Original) An organic electroluminescence element set forth in Claim 1, wherein the light emission layer arranged close to said anode and the light emission layer arranged close to said cathode are made of the same material mutually.

8. (Canceled)

9. (Previously Presented) An organic electroluminescence element set forth in Claim 1, wherein any of organic thin film layers constituted by the light emission layer or a hole transport layer or an electron transport layer which is formed on the light emission layer if necessary, and provided in contact with the charge generation layer on the substrate side is formed by a polymer material.

10. (Currently Amended) A organic electroluminescence [[unit]] element according to claim 1, wherein all organic thin film layers constituted by the light emission layer or a hole transport layer or an electron transport layer which is

provided on the light emission layer if necessary are formed by a polymer material.

11. (Currently Amended) An organic electroluminescence element set forth in Claim 1, wherein said charge generation ~~layers comprise~~ layer comprises a high polymer-based organic film.

12. (Original) An organic electroluminescence element set forth in Claim 1, wherein the organic thin film layer and the charge generation layer are fabricated by a film-forming method based on a wet process.

13. (Original) An organic electroluminescence element set forth in Claim 1, wherein the drying temperature for the organic thin film layer arranged close to said cathode is one not exceeding the glass transition temperature of the light emission layer arranged close to said anode.

14. (Original) An exposure unit which uses the organic electroluminescence element set forth in Claim 1 as the light source.

15. – 20. (Canceled)

21. (Currently Amended) An exposure unit which uses an organic electroluminescence element as a light source, said element comprising, on a substrate, set forth in Claim 20,

an anode which acts as a hole injection electrode;

a cathode which acts as an electron injection electrode;

a plurality of light emission layers each having a light emission region;

a charge generation layer which injects electrons into a light emission layer arranged close to said anode and holes into a light emission layer arranged close

to said cathode, and said light emission layers and said charge generation layer being arranged between said anode and said cathode;

wherein the unit comprises a waveguide the end plane of which in the sub-scanning direction is configured as the light emerging plane, and the light which emits from said organic electroluminescence element, incident on said waveguide, and emerges from said light emerging plane as the exposure light;

wherein said waveguide comprises:

a core having a specified refractive index wherein said core has a refractive index smaller than that of said light emission layers; and

a clad that is formed around the outer periphery of said core and has a refractive index smaller than that of said core.

22. (Currently Amended) An exposure unit which uses an organic electroluminescence element as a light source, said element comprising, on a substrate: set forth in Claim 20,

an anode which acts as a hole injection electrode;

a cathode which acts as an electron injection electrode;

a plurality of light emission layers each having a light emission region;

a charge generation layer which injects electrons into a light emission layer arranged close to said anode and holes into a light emission layer arranged close to said cathode, and said light emission layers and said charge generation layer being arranged between said anode and said cathode;

wherein the unit comprises a waveguide the end plane of which in the sub-scanning direction is configured as the light emerging plane, and the light which emits from said organic electroluminescence element, incident on said waveguide, and emerges from said light emerging plane as the exposure light;

wherein said waveguide comprises:

a core having a specified refractive index wherein the refractive index of said core is larger than the value obtained by subtracting 0.3 from the refractive index of said light emission layer; and

a clad that is formed around the outer periphery of said core and has a refractive index smaller than that of said core.

23. – 27. (Canceled)

28. (Currently Amended) An exposure unit which uses an organic electroluminescence element as a light source, said element comprising, on a substrate: set forth in Claim 25;

an anode which acts as a hole injection electrode;

a cathode which acts as an electron injection electrode;

a plurality of light emission layers each having a light emission region;

a charge generation layer which injects electrons into a light emission layer arranged close to said anode and holes into a light emission layer arranged close to said cathode, and said light emission layers and said charge generation layer being arranged between said anode and said cathode;

wherein the unit comprises a waveguide the end plane of which in the sub-scanning direction is configured as the light emerging plane, and the light which emits from said organic electroluminescence element, incident on said waveguide, and emerges from said light emerging plane as the exposure light;

wherein, in said waveguide, an angle conversion unit is formed wherein said angle conversion unit is formed at the interface between said core and clad located at the opposite side of said light emission layer that converts the angle of the light impinging on said waveguide from said light emission layer to guide to said light emerging plane.

29. – 32. (Canceled)

33. (Currently Amended) An exposure unit which uses an organic electroluminescence element as a light source, said element comprising, on a substrate: set forth in Claim 15,

an anode which acts as a hole injection electrode;
a cathode which acts as an electron injection electrode;
a plurality of light emission layers each having a light emission region;
a charge generation layer which injects electrons into a light emission layer arranged close to said anode and holes into a light emission layer arranged close to said cathode, and said light emission layers and said charge generation layer being arranged between said anode and said cathode;

wherein the organic electroluminescence element is applied a negative voltage between said anode and said cathode during the period of no light emission.

34. – 39. (Canceled)

40. (New) An organic electroluminescence element comprising, on a substrate;

an anode which acts as a hole injection electrode;
a cathode which acts as an electron injection electrode;
a plurality of light emission layers each having a light emission region; and
a charge generation layer which injects electrons into a light emission layer arranged close to said anode and holes into a light emission layer arranged close to said cathode, and said light emission layers and said charge generation layer being arranged between said anode and said cathode, wherein the potential difference between the ionization potential of the light emission layer arranged close to said cathode and the ionization potential of said charge generation layer is configured 0.6 eV or less.

41. (New) An organic electroluminescence element comprising, on a substrate;

- an anode which acts as a hole injection electrode;
- a cathode which acts as an electron injection electrode;
- a plurality of light emission layers each having a light emission region; and
- a charge generation layer which injects electrons into a light emission layer arranged close to said anode and holes into a light emission layer arranged close to said cathode, and said light emission layers and said charge generation layer being arranged between said anode and said cathode, wherein the potential difference between the electron affinity of the light emission layer arranged close to said anode and the electron affinity of said charge generation layer is configured 0.6 eV or less.